(909) 396-2000 · www.agmd.gov

May 14, 2008

Mr. Gerardo Rios (R9AirPermits\_sc@epa.gov) USEPA Region IX Mail Stop AIR-3 75 Hawthorne San Francisco, CA 94105

SUBJECT:

Black Hills Ontario, LLC., Facility ID No. 113240

Facility Location: 705 E. California Street, Ontario, CA 91761

Dear Mr. Rios:

The South Coast Air Quality Management District (AQMD) has received a Title V application for a "minor permit revision" from Black Hills Ontario, LLC. The applicant has requested that the Gas Turbines (D1) and (D4) be allowed to operate as a RECLAIM "Non-Operated Major Sources". Two conditions, E 313 and E 315, were added to affect this request.

Applications and Descriptions

Application No.	Description
480125	Application requesting Non-Operated Major Source for Gas Turbine D4.
480126	Application requesting Non-Operated Major Source for Gas Turbine D1.
480127	Title V revision application.

The AQMD has evaluated the subject permit applications and made a preliminary determination that the equipment will comply with all of the applicable requirements of our Rules and Regulations. The AQMD is required under Rule 3005 (c) to provide a copy of the proposed permit to the EPA Administrator for a 45-day review. As such, a copy of the proposed revision to the existing Title V permit is attached along with our engineering analysis for your review.

If you wish to provide comments or have any questions regarding this project, please contact Mr. Hamilton A. Stoddard at (909) 396-2482/ <a href="mailto:hstoddard@aqmd.gov">hstoddard@aqmd.gov</a>.

Sincerely,

Michael D. Mills, P.E., Senior Manager General Commercial and Energy Team

michael D. Mills

Engineering and Compliance

Enclosure MM:JTY:has

Mr. Ron Hoffard, Harbor Cogeneration Co., Plant Manager Mr. Finis Carlton, Carlton Engineers & Consultants, Inc.

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Title Page

Facility I.D.#: 113240 Revision #: DRAFT Date: May 14, 2008

#### **FACILITY PERMIT TO OPERATE**

### BLACK HILLS ONTARIO LLC 705 E CALIFORNIA ST ONTARIO, CA 91761

#### **NOTICE**

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env. EXECUTIVE OFFICER

Mohsen Nazemi, P.E.

Deputy Executive Officer

Engineering & Compliance

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# FACILITY PERMIT TO OPERATE. BLACK HILLS ONTARIO LLC

# SECTION D. FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : INTERNAL COM					
System 1 : COGENERATION	N SYSTI	EM 1	1		
GAS TÜRBINE, NO. 1, NATURAL GAS, DETROIT DIESEL ALLISON, MODEL 501-KH, WITH STEAM OR WATER INJECTION, 51.1 MMBTU/HR WITH A/N:	Ď1	D2	NOX: MAJOR SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 407,4-2-1982]; NOX: 42 PPMV NATURAL GAS (4) [RULE 1303(a)(1)- BACT,5-10-1996]; NOX: 268	A63.1, A63.2, A327.1, E17.1, E51.1, E313.1, E315.1
*.				PPMV (8) [40CFR 60 Subpart GG,3-6-1981]	
				PM: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409,8-7-1981] ; PM: 0.01 GRAINS/SCF NATURAL GAS	,
	e.			(5A) [RULE 475,10-8-1976;RULE 475,8-7-1978]	,
	:			PM: 11 LBS/HR NATURAL GAS (5A) [RULE 475,10-8- 1976; RULE 475,8-7-1978]; SOX: 150 PPMV (8) [40CFR 60 Subpart GG,3-6-1981]	•
GENERATOR, 6.054 MW					
BOILER, DELTAK CORPORATION, 60,000 LB/HR, WASTE HEAT, UNFIRED					
HEATER, 21,780 LB/HR, UNFIRED		, ,			

*	(1)(1A)(1B)	Denotes RECLAIM emission factor		(2)(2A)(2B) Denotes RECLAIM emission rate	
	(3)	Denotes RECLAIM concentration limit		(4) Denotes BACT emission limit	
	(5)(5A)(5B)	Denotes command and control emission limit	•	(6) Denotes air toxic control rule limit	
	(7)	Denotes NSR applicability limit		(8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS,etc.)	
	(9)	See App B for Emission Limits	•	(10) See Section J for NESHAP/MACT requirements	

<sup>\*\*</sup> Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

Section D Page: 2 Facility I.D.: 113240 Revision #: DRAFT Date: May 14, 2008

# FACILITY PERMIT TO OPERATE BLACK HILLS ONTARIO LLC

#### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1: INTERNAL COM	4BUSTI	ON			•
BURNER, NATURAL GAS, COEN, DUCT, 40 MMBTU/HR A/N:	D2	D1 \$3	NOX: MAJOR SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 407,4-2-1982]; NOX: 42 PPMV NATURAL GAS (4) [RULE 1303(a)(1)- BACT,5-10-1996]; PM: 11 LBS/LB (5) [RULE 475,10-8- 1976  RULE 475,8-7-1978]; PM: 0.01 GRAINS/SCF (5A) [RULE 475,10-8-1976; RULE 475,8-7-1978]; PM: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409,8-7-1981]	A327.1
STACK, GAS TURBINE NO. 1 A/N:	S3	D2			D82.1
System 2 : COGENERATIO	N SYSTI	EM 2			
GAS TURBINE, NO. 2, NATURAL GAS, DETROIT DIESEL ALLISON, MODEL 501-KH, WITH STEAM OR WATER INJECTION, 51.1 MMBTU/HR WITH A/N:	D4	D5	NOX: MAJOR SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 407,4-2-1982]; NOX: 42 PPMV NATURAL GAS (4) [RULE 1303(a)(1)- BACT,5-10-1996]; NOX: 268 PPMV (8) [40CFR 60 Subpart GG,3-6-1981]  PM: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409,8-7-1981]; PM: 11 LBS/LB (5A) [RULE 475,10-8-1976; RULE 475,8-7-1978]	A63.1, A63.2, A327.1, E17.1, E51.1, E313.1, E315.1



3) Denotes RECLAIM concentration limit

(5)(5A)(5B) Denotes command and control emission limit

(7) Denotes NSR applicability limit

See App B for Emission Limits

(2)(2A)(2B) Denotes RECLAIM emission rate

(4) Denotes BACT emission limit

(6) Denotes air toxic control rule limit,

(8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)

(10) See Section J for NESHAP/MACT requirements

\*\* Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

Section D
Facility I.D.:

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# FACILITY PERMIT TO OPERATE BLACK HILLS ONTARIO LLC

#### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : INTERNAL COM	ABUSTI:	ON			*. *
				PM: 0.01 GRAINS/SCF (5B) [RULE 475,10-8-1976; RULE 475,8-7-1978]; SOX: 150 PPMV (8) [40CFR 60 Subpart GG,3-6-1981]	
GENERATOR, 6.054 MW					.f
BOILER, DELTAK CORPORATION, 60,000 LB/HR, WASTE HEAT, UNFIRED					
HEATER, 21,780 LB/HR, UNFIRED				-	
BURNER, NATURAL GAS, COEN, DUCT, 40 MMBTU/HR A/N:	D5	D4 S6	NOX: MAJOR SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 407,4-2-1982]; NOX: 42 PPMV NATURAL GAS (4) [RULE 1303(a)(1)- BACT,5-10-1996]; PM: 0.01 GRAINS/SCF NATURAL GAS (5A) [RULE 475,10-8-1976	A327.1
4				RULE 475,8-7-1978]; PM: 11 LBS/LB NATURAL GAS (5B) [RULE 475,10-8-1976; RULE 475,8-7-1978]; PM: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409,8-7-1981]	
STACK, GAS TURBINE NO. 2 A/N:	\$6	D5		,	D82.1

(	1	)(	1	Α	)(	1	B	D	enotes	R	ECL	A	ΙM	emi	ssion	factor

(3) Denotes RECLAIM concentration limit

(5)(5A)(5B) Denotes command and control emission limit

(7) Denotes NSR applicability limit

See App B for Emission Limits

(2)(2A)(2B) Denotes RECLAIM emission rate

(4) Denotes BACT emission limit

(6) Denotes air toxic control rule limit

(8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)

(10) See Section J for NESHAP/MACT requirements

\*\* Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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# **FACILITY PERMIT TO OPERATE BLACK HILLS ONTARIO LLC**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2: R-219 EXEMPT	<b>EQUIPM</b>	ENT SUВЛ	ECT TO SOURC	E-SPECIFIC RULES	
RULE 219 EXEMPT EQUIPMENT, CLEANING EQUIPMENT, SMALL, UNHEATED, NON-CONVEYORIZED	E14		, .	t.	H23.1
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS	E16			ROG: (9) [RULE 1113,5-14- 1999;RULE 1113,7-20-2001;RULE 1171,6-13-1997;RULE 1171,10-8- 1999]	K67.1

			emission	

Denotes RECLAIM concentration limit

(5)(5A)(5B) Denotes command and control emission limit

Denotes NSR applicability limit.

See App B for Emission Limits

(2)(2A)(2B) Denotes RECLAIM emission rate

Denotes BACT emission limit (4)

(6) Denotes air toxic control rule limit

(8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS,etc.)

(10)See Section J for NESHAP/MACT requirements

Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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# FACILITY PERMIT TO OPERATE BLACK HILLS ONTARIO LLC

# SECTION D: DEVICE ID INDEX

The following sub-section provides an index to the devices that make up the facility description sorted by device ID.

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# FACILITY PERMIT TO OPERATE BLACK HILLS ONTARIO LLC

# SECTION D: DEVICE ID INDEX

	Device Index For Sec	tion D	
Device ID	Section D Page No.	Process	System
<b>D</b> 1	1	1.	1
. D2	2	1	1
· \$3	2	1	. 1
D4	2	. 1	. 2
D5	3	1 .	2
S6	3	. 1	2
E14	4	2	0 .
E16	4	2	0

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# FACILITY PERMIT TO OPERATE BLACK HILLS ONTARIO LLC

#### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

#### **FACILITY CONDITIONS**

- F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:
  - (a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or
  - (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[RULE 401, 3-2-1984; RULE 401, 9-11-1998]

#### **DEVICE CONDITIONS**

#### A. Emission Limits

A63.1 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 382 LBS IN ANY ONE DAY
ROG	Less than or equal to 54 LBS IN ANY ONE DAY
PM	Less than or equal to 64 LBS IN ANY ONE DAY

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from system 1 and system 2.

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: D1, D4]

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### **FACILITY PERMIT TO OPERATE** BLACK HILLS ONTARIO LLC

#### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

A63.2 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT	
SOX	Less than or equal to 4 LBS IN ANY ONE DAY	
CO	Less than or equal to 229 LBS IN ANY ONE DAY	~ "
ROG	Less than or equal to 32 LBS IN ANY ONE DAY	<b>.</b> .
.PM	Less than or equal to 38 LBS IN ANY ONE DAY	÷

#### [RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: D1, D4]

A327.1 For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.

[RULE 475, 10-8-1976; RULE 475, 8-7-1978]

[Devices subject to this condition: D1, D2, D4, D5]

#### D. Monitoring/Testing Requirements

The operator shall install and maintain a CEMS to measure the following parameters:

NOX concentration in ppmv

The CEMS will convert the actual NOX concentrations to mass emission rates (lbs/hr) and record the hourly emission rates on a continuous basis.

[RULE 2012, 5-6-2005; RULE 218, 8-7-1981]

[Devices subject to this condition: S3, S6]

#### . E. Equipment Operation/Construction Requirements

Date:

### **FACILITY PERMIT TO OPERATE** BLACK HILLS ONTARIO LLC

#### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The operator shall not use more than 1 of the following items simultaneously:

Device ID: D1 [TURBINE, NO. 1]

Device ID: D4 [TURBINE, NO. 2]

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: D1, D4]

The following condition number(s) shall not apply if any of the requirements stated below are met:

Condition number 17-1

Requirement number 1: whenever boiler #3 (described in permit No. 11251B, Sunkist Growers Inc., ID 23196) is not in operation, or during switchover not to exceed 12 hours.

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: D1, D4]

- E313.1 This device is classified as a non-operated major NOx source as defined under Rule 2012 and shall not be operated unless the Facility Permit holder provides written notification to the Executive Officer 30 days prior to starting operation. In order to maintain the non-operational classification, the Facility Permit holder shall:
  - Remove a section of the fuel feed line(s) to the device and place a blind flange on both ends of the fuel feed line(s); and
  - Remove the steam line(s) to California Milk Producers facility and place a blind flange on both ends of the (b) steam line(s).

Removal of parts or components solely to qualify the device for non-operated classification pursuant to this condition, or replacement of the same removed parts or components resulting in the device no longer being classified as non-operated shall not be deemed to affect the potential to emit within the meanings of Rule 2005, Regulation XIII and Regulation XXX.

[RULE 2012, 5-6-2005]

[Devices subject to this condition: D1, D4]

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# FACILITY PERMIT TO OPERATE BLACK HILLS ONTARIO LLC

#### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

E315.1 Once this device is operated, it shall no longer be classified as non-operational. This device shall also meet the monitoring requirements of Rule 2012, subparagraph (c)(2)(A) or (c)(2)(B) no later than 30 calendar days after the start of operation except as provided in Rule 2012, paragraph (c)(10).

[RULE 2012, 5-6-2005]

[Devices subject to this condition: D1, D4]

#### H. Applicable Rules

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
ROG	District Rule	1122

[RULE 1122, 7-11-1997]

[Devices subject to this condition: E14]

K. Record Keeping/Reporting

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Date:

### **FACILITY PERMIT TO OPERATE** BLACK HILLS ONTARIO LLC

#### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s): K67.1

> For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.

> For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings.

[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: E16]